

## CLAIM AMENDMENTS

Claims 1 through 3 (canceled)

1           4. (Currently amended) A composition for treating crude  
2       oils to improve flow and to facilitate extraction from oil wells,  
3       which comprises:

4           (a)    20 to 30% by volume of a phenolic oil which is a  
5       distillation fraction having a distillation temperature range from  
6       170 to 190°C;

7           (b)  20 to 40% by volume of an absorption oil, which is a  
8       distillation fraction having a distillation temperature range from  
9       250 to 270°C;

10          (c)  20 to 40% by volume of a polymerization oil which is  
11       a distillation fraction having a distillation temperature range  
12       from 320 to 350°C; and

13          (d)  balance of the composition up to 100% by volume of a  
14       mixture of chemical additives containing a surfactant, a gas  
15       generator, an acidic substance, and a solvent, the density of the  
16       composition being ~~110 to 112~~ 1.10 to 1.12 g/cm<sup>3</sup>.

1           5. (previously presented) The composition for treating  
2 crude oil defined in claim 4 wherein the volumetric ratio of the  
3 phenolic oil, the absorption oil, and the polymerization oil is  
4 1:1:1.

1           6. (previously presented) The composition for treating  
2 crude oil defined in claim 4 wherein the phenolic oil comprises  
3 cresols, naphthalenes, and anthracenes with various chemical  
4 radicals attached thereto and having a density of 1.15 to 1.20  
5 g/cm<sup>3</sup>; the absorption oil comprises phenanthrene, fluorene,  
6 carbosols, and fluoranthrene and having a density of 1.19 to 1.22  
7 g/cm<sup>3</sup>, and the polymerization oil comprises pyrene, acenaphthenes,  
8 and chrysenes, and having a density of 1.20 to 1.23 g/cm<sup>3</sup>.

1           7. (previously presented) The composition for treating  
2 crude oil defined in claim 4 wherein the mixture of chemical  
3 additives consists of 25% by weight of a surfactant, 10% by weight  
4 of a gas generating substance, which are decomposed at a  
5 temperature less than 70°C causing the generation of gases, 15% by  
6 weight of an acidic substance, and the balance solvent to 100%.

1           8. (currently amended) The composition for treating  
2 crude oil defined in claim 4 which comprises 30% by volume of a  
3 phenolic oil, 30% by volume of an absorption oil, 20% by volume of  
4 a polymerization oil, and 20% by volume of a mixture of chemical  
5 additives comprising 10% by weight of ammonium carbonate, [[35%]]

6     25% by weight of nonylphenol ethoxylated with 5 to 9 ethoxy groups,  
7     15% by weight of phenol, and the balance a solvent up to 100%.

1             9. (currently amended) A process for treating crude oils  
2     to improve flow and to facilitate extraction from an oil well by  
3     preventing formation of deposits clogging oil derricks used in the  
4     extraction of the crude oils, which comprises the steps of:

5             (i) injecting a composition which comprises

6             (a) 20 to 30% by volume of a phenolic oil which is a  
7     distillation fraction having a distillation temperature range from  
8     170 to 190°C;

9             (b) 20 to 40% by volume of an absorption oil, which is a  
10    distillation fraction having a distillation temperature range from  
11    250 to 270°C;

12            (c) 20 to 40% by volume of a polymerization oil which is  
13    a distillation fraction having a distillation temperature range  
14    from 320 to 350°C; and

15            (d) balance of the composition up to 100% by volume of a  
16    mixture of chemical additives containing a surfactant, a gas  
17    generator, an acidic substance, and a solvent, the density of the  
18    composition being ~~1.10 to 1.12~~ 1.10 to 1.12 g/cm<sup>3</sup>;

19 under pressure into a tubing or through a production casing for  
20 crude oil extraction through the oil well;

21 (ii) ceasing fluid extraction from the oil well through  
22 the tubing or the production casing into which the composition  
23 according to step (i) has been injected, for a period of 4 to 8  
24 hours, to penetrate and open up the oil well; and

25 (iii) following step (ii), resuming extraction of crude  
26 oil from the oil well.

1 10. (previously presented) The process for treating crude  
2 oils defined in claim 9 wherein an effective amount of the  
3 composition to prevent clogging of the oil derricks is injected  
4 according to step (i) to ensure a distribution of 5m<sup>3</sup> of  
5 solution/meter through a perforated portion of the tubing portion.

1 11. (currently amended) A process for treating crude  
2 oils to facilitate crude oil extraction from an oil well by  
3 preventing formation of deposits clogging lines leading from oil  
4 derricks used in the extraction of the crude oils, which comprises  
5 the steps of:

6 (i) injecting a composition which comprises

7 (a) 20 to 30% by volume of a phenolic oil which is a  
8 distillation fraction having a distillation temperature range from  
9 170 to 190°C;

(b) 20 to 40% by volume of an absorption oil, which is a distillation fraction having a distillation temperature range from 250 to 270°C;

(c) 20 to 40% by volume of a polymerization oil which is a distillation fraction having a distillation temperature range from 320 to 350°C; and

(d) balance of the composition up to 100% by volume of a mixture of chemical additives containing a surfactant, a gas generator, an acidic substance, and a solvent, the density of the composition being ~~1.10 to 1.12~~ 1.10 to 1.12 g/cm<sup>3</sup>, through a line for conveying the crude oil, extracted from an oil well, and in the case of a line whose flow there through is blocked, employing a maximum pressure value which is limited by the pressure that the tubing can withstand;

(ii) maintaining the pressure within the line for a period of 4 to 8 hours; and

(iii) following step (ii), resuming the flow of crude oil through the line from the oil well.

1           12. (previously presented) The process for treating crude  
2       oils defined in claim 9 wherein following steps (ii) and (iii), if  
3       the crude oil extraction has not returned to a sufficient level,  
4       again injecting the composition according to step (i) into the  
5       tubing or through the production casing.

1           13. (previously presented) The process for treating crude  
2       oils defined in claim 11 wherein following steps (ii) and (iii), if  
3       the crude oil flow through the line has not returned to a  
4       sufficient level, again injecting the composition according to step  
5       (i) into the line for conveying the crude oil.